ILLINOIS CENTURY NETWORK

JULY 25, 2001 POLICY COMMITTEE MINUTES

Submitted for: Action

Summary: Distribution of July 25, 2001 minutes for review by the Policy

Committee.

Action Requested: Adoption of July 25, 2001 minutes.

Recommended That the ICN Policy Committee adopts the July 25, 2001 minutes

Motion: with any edits as noted.

ILLINOIS CENTURY NETWORK

JULY 25, 2001 POLICY COMMITTEE MINUTES

The meeting was called to order by Mary Reynolds.

Members present: Jean Wilkins, Illinois State Library; Bruce McMillan, State Museum; Keith Sanders, Illinois Board of Higher Education; Virginia McMillan, representing Joe Cipfl, Illinois Community College Board; Mary Reynolds, Governor's Office; Lugene Finley, Illinois State Board of Education; Frank Cavallaro, representing Mike Schwartz, Department of Central Management Services.

Others attending included: Doug Dougherty, Illinois Telecommunications Association Neil Matkin, Lynn Murphy, Karlin Sink, Dirk French, Doug Jurewicz, and Rebecca Dineen all from the Illinois Century Network.

1. Policy Committee Minutes

Staff requests the adoption of the June 1, 2001 Policy Committee meeting minutes.

Motion: Keith made motion; Lugene seconded.

Keith Sanders moved that the ICN Policy Committee adopt the June 1, 2001 minutes with any edits as noted. (No edits were noted.)

Motion carried.

2. Announcements

Mary invited everyone to visit Techtown between 10:00 a.m. and 8:00 p.m. at the Illinois State Fair. The ICN will provide network connectivity for Techtown through the generosity of Ameritech. The entire building will showcase the technology of over two-dozen state agencies including ISBE and IBHE and agencies such as Argonne. The ICN will also be a part of the Illinois Online Leadership Council exhibit.

3. Remarks

Neil distributed the ICN Facts at a Glance sheet. The ICN now has almost 5000 institutions connected and is serving an estimated 1.4 million people of approximately 11 million people in the state.

Senior staff will have a budget plan ready for the September Policy Committee meeting. The staff is also working on monthly budget reports. Currently, the reports are generated manually from state systems, but the staff is investigating ways to make the process faster and more automatic.

Staff has started to inventory all ICN network equipment located at approximately 200 sites throughout the state. Staff has worked closely with the Auditor General and ISBE personnel to perform the inventory and ensure a smooth transition of ownership from ISBE to ICN with the IBHE acting as fiscal agent. Conducting the inventory should take about two weeks. Once complete, an audit firm will come in and do a statistical or sampling audit.

Neil has received the final draft of the Advanced Engineering Taskforce report. Once the report is edited and formatted, it will be mailed to the Policy Committee Members and designees. The Committee should get a preview of the report in September. Some of the issues identified in the report will be discussed later in this meeting.

Neil extended his appreciation to Director Schwartz and his associates for CMS's continued support in streamlining the ICN procurement process allowing the ICN to react more quickly to constituent needs. Neil also extended thanks to Keith Sanders for helping expedite the process with Director Schwartz. Keith added his appreciation to CMS for their openness and willingness to negotiate through some tough issues.

Jean noted that this week was the kick-off for the Gates grant for public libraries. Libraries will receive a little more than 4 million dollars through the Gates foundation. The grant is for public libraries only and 702 in Illinois qualify. In order to determine eligibility, libraries complete an application providing general and technical information.

4. Network Operating Policy

A revision to the motion included with the agenda was distributed. Neil led a discussion on the types of educational and religious institutions that can connect to the ICN. There are two types of institutions addressed in this item - for-profit accredited education entities such as DeVry and non-profit religious organizations that serve Illinois citizens. Several different religious organizations operate day care centers and after or before school programs that are directly tied to education especially in rural communities and some of the urban communities.

The staff's recommendation attempts to determine the conditions under which religious institutions and for-profit education institutions are allowed to connect to the network. The conditions are outlined in the revised motion that Neil distributed. Both motions are in keeping with Illinois statute and the Illinois Constitution. Secondarily, the amount of bandwidth needed by religious organizations is minuscule and self-limiting in the respect that they have to pay for their own access point to connect to the network. As long as the for-profit institutions abide by the participation agreement and are not re-selling services as profit centers the staff is recommending that the Policy Committee approve allowing those institutions to connect under the conditions specified in the motion.

Keith asked about using the term "non-discriminatory" in the revised motion. Neil explained that the terminology is used to describe institutions that are not providing services for their membership only. It is our attorneys' recommendation that ICN has no business providing connection to services that are targeted or legally discriminatory services. Mary used daycare centers as an example; if a daycare is religiously based, but will take children of any denomination, then they would be eligible to connect. ISBE uses some of the same guidelines in providing some technical resources to non-public schools.

Keith asked whether a for-profit religious organization (i.e. daycare) would be covered under both policies. Neil responded that it is necessary to have both motions because the for-profit educational entities must also be accredited by the Board of Higher Education or State Board of Education.

Keith asked about broadening the use of the phrase "exclusively for the purpose of providing educational content" to include "non-denominational educational content". The change is suggested in an effort to keep the ICN from being accused of subsidizing one group and not another. After a brief discussion, it was decided to leave the motion as presented recognizing that the possibility exists that there may be denominational religious materials on the network.

Virginia commented that even though the phrase "exclusively for the purpose of providing educational content and services" is included it would be extremely difficult to monitor.

Neil reminded the Committee that all institutions are required to sign a participation agreement. It is based on the honor system that the ICN believes that institutions are connected for the purpose that they have stated and that they are following the guidelines set in the participation agreement. It would be next to impossible to police every constituent. The phrasing is a legal differentiation, more for the protection of the ICN and its policies as opposed to something that is actually enforceable, although blatant violations of the participation agreement would not be tolerated. Legal council is modifying the participation agreement to reflect the inclusion of for-profit and religious organizations offering services as described in this motion.

Motion: Keith made motion; Jean seconded.

Keith Sanders moved that the Policy Committee adopt staff recommendations to allow for-profit accredited education entities authorized to operate in the State of Illinois by the applicable education board to connect to the network exclusively for the purpose of providing educational content and services subject to current policies and future cost recovery policies. The network may not be used for for-profit administrative purposes.

Keith also moved that the Policy Committee adopt staff recommendations to allow public service providers of not-for-profit services to Illinois citizens, including non-discriminatory educational services sponsored by religious organizations, to connect to

the network subject to current policies and future cost recovery policies and limited to the specific purposes herein approved for the connection.

Discussion: Lugene asked that he and Gerald Spinner see the modified participation agreement when it became available. Mary asked whether entities sign new participation agreements on a regular basis. Neil indicated that entities that have connected to the ICN and those that were transferred from LincOn were required to sign the ICN participation agreement so that all are current. Motion carried.

5. Intergovernmental Cooperation Agreement

This agreement brings the funding agencies together to work long term for the ICN. The interagency cooperation agreement seeks to recognize the ICN as a legislative entity. This is the position of legal staff on all sides. The ICN has been working with Gerald Spinner at the State Board of Education, Bill Feurer at the Board of Higher Education and has retained separate counsel with Feldman, Wasser, Draper and Benson. In light of previous discussions with the Policy Committee, this agreement identifies the BHE as the fiscal agent on behalf of the ICN. In that role, the agreement specifies that IBHE employ a director and staff to implement and administer the network according to policies passed by this group. The agreement also establishes the duties of the director and reporting responsibility as well as identifying the fiscal agent and assigns that fiscal agent the principal role in all the contracts and ownership of property. It creates a long-term agreement between the two boards and other partners that might join at a later time. On page 23 of the agenda are provisions for review, modifications, termination and the joinder. The joinder allows for this agreement to expand and incorporate other bodies that might have a special interest in becoming a funding entity. There will be some entities that are likely to take advantage of that. The ICN is in discussions with multiple hospital groups that are very interested in having the ICN serve as their primary network. The BHE Board will vote on this agreement at their August 21, 2001 meeting.

Motion: Virginia made motion; Lugene seconded.

Virginia moved that the Policy Committee approve the Intergovernmental Cooperation Agreement between the State Board of Education and the Board of Higher Education as the funding agencies of the Illinois Century Network in order to establish the Illinois Century Network as a fully functional entity for which the Board of Higher Education will serve as fiscal agent.

Discussion: Lugene indicated that the State Board of Education does not need to act legally on the agreement in the same fashion as the Board of Higher Education. Keith supports the agreement and will take it to the BHE Board with his strong recommendation.

Motion carried

6. Advanced Engineering Taskforce Membership Selection

The ICN has received multiple requests across the state from people who would like to be part of the Advanced Engineering Taskforce (AET). A list of current members was distributed. Procedures that determine how individuals can become involved need to be developed. Areas of interest that are not well represented on the AET include research institutions, local government, and museums. Neil expressed his concern that the ICN have a procedure in place that the policy committee can approve to ensure that we have representation that guides the Network's future development and that reflects the constituencies. Neil also added that ICN staff attend the meetings as a resource to the Taskforce.

Motion: Keith moved; Lugene seconded.

Keith moved that the Policy Committee adopt staff recommendations regarding constituency representation, appointments, length of membership terms, and reporting schedule for the Advanced Engineering Taskforce.

Motion carried

7. ICN Roles and Responsibilities

Lynn provided a brief explanation of the roles and responsibilities of the different areas of the ICN. This was developed as a complementary piece to the revised organization chart that was provided at the last meeting. Mary suggested defining the role of the Learning Technology Centers (LTCs) and other regional organizations such as libraries and higher ed consortia even though they are not part of the ICN. Lugene did not disagree with adding the LTC, but wanted to be sure that it did not appear as though they were a part of the ICN. To date, all documents that have been handed out have shown the LTCs to be under the control of ISBE and the RTCs to be under the control of ICN. The staff will work with other agency staff to develop a comprehensive list that will be distributed to the Policy Committee in the future. Keith commented that the importance of the document is to show Illinois citizens that there is a relationship between all of these entities.

8. ICN Custom DS1/T1 Customer Service Agreement Extension

Neil introduced Dirk French. Dirk explained that the Illinois Video Education Network consortia members were facing expiration of contracts based on soon to be discontinued tariffs. This would result in dramatic increases of T1 costs over the next few months. The ICN approached Ameritech with a proposal to extend the ICN custom T1 tariff rates to both IVEN users and ICN constituents who connect to sites not officially paid for, owned, or sponsored by ICN, such as ICN POP sites. Depending on locale and the contract term that they choose. ICN constituents could save up to 40% off standard tariffs. Under this agreement, constituents can choose to contract individual circuits for different lengths of time if that flexibility is something they require.

The extension of this custom pricing only applies to the Ameritech service area which covers about 60% of ICN's primary constituents. The service agreement extension will

impact E-rate reimbursements and some schools may need to re-apply for e-rate funding if they change contract terms. Doug Jurewicz will coordinate with Ricardo Tostado on the implementation and impact for K12 schools.

In anticipation of constituent needs, Neil indicated that Dirk and Doug have already begun to re-negotiate a future ICB or Individual Case Basis tariff that would give ICN constituents discounts on circuits larger than a T1.

9. Community Network Evaluation Procedures: MSA-by-MSA Analysis

The ICN backbone Map, Telecommunications Map, and a combination of the two maps were distributed. Doug explained that a ninety-day MSA-by-MSA analysis is underway to identify where constituents are located and the costs they incur in order to gain a better understanding of how the ICN can more effectively meet the needs of its constituents. The handouts illustrate that the ICN has done an excellent job of bringing at least one POP to every MSA within the state. On the most recent telecommunications map released by the Illinois Commerce Commission, each color represents a different telecommunications provider. The white areas represent many different small providers. Ameritech reaches 60% of our constituents, but 40% of our constituents have to acquire service from the variety of carriers throughout the state. In some instances, constituents have to purchase transport from three different telecommunications carriers to get to the network; as a result they are paying three fees. In some parts of the state there are T1 lines that cost constituents as much as \$800 per month. The ICN is looking for ways to lower these costs. Through the MSA analysis, we hope to re-engineer or extend our network out to our constituents thus reducing their costs without substantially increasing our costs. We are 30 days into this 90-day analysis and will have a draft report by November.

Neil also indicated that this analysis deals directly with the community network concept. The community network process is essentially flawed in the sense that constituents have to pay for two connections - one at the local loop to the telephone company and one at the community network point. In coordination with this analysis, the ICN is investigating what can legally done to cooperate with telephone companies to help them function as the community network point so constituents not only have a local access point but only have to pay for one connection. Ameritech has led the way by providing the ICN some great pricing. Neil has spoken with Doug Dougherty at the Illinois Telecommunications Association regarding these issues, and meet with the executive director of Illinois Commerce Commission two weeks ago. The ICC executive director has agreed to assign legislative legal staff and analysts to work with us. Neil extended his appreciation to Mary for her help in facilitating that meeting and securing those resources.

The role of wireless technologies as a means to reduce costs was raised. Neil responded that wireless has achieved this goal in some locations. The ICN is using wireless at Adam's Telco and part of the backbone link is wireless. Wireless technology is not always cost effective, but there are some applications where it may make sense to encourage its use. We have met with CIPS and acquired a map of all their towers throughout Western and Southern Illinois and are exploring some alternative possibilities

if telecommunications companies are not able to provide affordable facilities, although this is not our preference. Some of the communities are using it for local distribution where it's more suited. Lynn has been working with an advisory group at Waubonsee Community College and their report is due out shortly after the grant ends in August. A copy of the preliminary report was sent to Neil, and Lynn will seek staff recommendations and feedback on the report.

Mary commented that there is a need for this analysis to answer the Governor's question of who is connected and why some are not connected. Mary also raised the possibility of using GIS in this analysis and offered to bring in expertise from other agencies if required. EPA, DOT, State Police, and Revenue all have an extensive GIS staff, and the State Board of Education has recently purchased software and trained their staff. Neil welcomed the offer. Currently, the staff is using MapInfo and other resources to gather the information that is already available. The ICN welcomes any additional information that other agencies could provide.

Mary raised the concern that community networks can be defined in human terms that are hard to quantify. Mary encouraged the ICN not to try to re-define the community based on boundaries. Neil responded that the ICN will provide a resource based on the geographic realities and does not believe that the ICN should try to re-define communities based on telecommunications terms. The staff will report in September or November on the state fiber efforts and state owned fiber. Virginia commented that the ICN should help people understand what the most efficient connections are and how those can be manipulated to serve the purposes of their defined community as well as a community that is more efficient.

Keith commented that the analysis does not attempt to determine what the network is being used for. This is a technical review, MSA by MSA. Keith asked, "Who is being educated that wouldn't otherwise be educated? Who went to a museum on the ICN who wouldn't have gone otherwise? Who got a book they couldn't otherwise get?" That information is being gathered from regional user groups. Keith reiterated his concern that the Board and others know how the people of the state benefit from the presence of the ICN.

The staff is also compiling a report on multicast technology. Multicast technology allows video streams at 30 rates per second to come across the network. This allows for simultaneous video cast, live lectures, materials, or documentaries from the Smithsonian or NASA for example. Staff is working not only to make people aware of applications that can be supported by the network but is also considering a plan to equip the Regional Technology Centers, and perhaps the Learning Technology Centers or Consortia, to be places throughout the state where people can go and see what can be achieved with this level of access.

Doug Dougherty, ITA, cautioned the group to think about tax dollars being used to bypass local private investment. The fact that the ICN receives federal and universal service funds continues to be a concern of Illinois Telephone Association's members, which are all represented on the telecommunications map. Some of the smaller ITA

members receive dollars from universal funds and that pot is shrinking. There is a case before the Commerce Commission that local independent telephone companies may have to raise their rates. Another concern is that he has heard the base constituency for this network is public institutions of higher education, community colleges, K12, museums and libraries, and the adoption of these two policy changes today begins to incorporate for-profit amenities and not-for profit religious organizations. Other than those concerns, he applauds the effort but believes the ICN needs to be careful as it applies a more vigorous network beyond the backbone and begins to serve constituents who he believes are out of the core group originally discussed.

Keith commented that we are trying to supplement the private investment not diminish it. It is not in the network's interest or in the state's interest to chase private vendors out of business. Keith also agreed with the need to be cautious and noted that Doug had a well made point.

Neil clarified that it was not the intent of the ICN to bypass local telco's and our legal inquiries and clarifications are to help determine what the ICN offers local telcos in partnership and collaboration. Mr. Dougherty welcomed the idea of collaboration and expressed his belief in public/private partnership. He offered his help in the event that ICN faces difficulties with local exchange carriers. Discussion of telecommunications markets and conditions throughout the state continued.

10. Permanent Virtual Circuits

Karlin explained that permanent virtual circuit (PVC) is a term used to represent taking a piece of bandwidth out of a large pipe and dedicating it toward one particular application. The ICN should provide PVCs because there are constituents who need specific amounts of bandwidth for certain applications. There are economies of scale that can be achieved if the ICN aggregates backbone bandwidth needs with constituent needs for dedicated bandwidth. The ICN has had four requests for PVC's from University of Illinois, Southern Illinois University - Carbondale, Bradley University, and Shawnee Public Library.

Lugene commented on the use of more sophisticated equipment and software like video streaming or web cast in schools. Without resources like dedicated bandwidth, the broadcast would be extremely slow. Mary added that Public Health connecting to hospitals would need dedicated private bandwidth to enable authenticity and to abide by federal regulations.

The ICN currently uses some PVCs to provide distance learning to schools. Constituents would be charged enough for a PVC to replenish the network in the event that services to primary constituents become compromised.

11. Cost Recovery Model

Neil discussed the complicated technical issues and the methodology behind the cost recovery model. The methodology the staff is pursuing assumes we are offering these services at their cost. The funding that ICN receives annually is used to lower the cost to constituents so that the ICN can continue to provide a network services at a lower cost than constituents would pay otherwise. For example, ITT and Argonne had a 40 megabit sustained video stream. That is 10 % of the entire network capacity. At this point, as constituent needs grow the ICN needs to have the ability to let them make a choice of whether they can afford to do that. If ITT wants to have 45 megabits of bandwidth, the ICN knows that there is a certain base level of bandwidth that we provide, and that anything beyond that that amount would be subject to cost recovery to allow us to build the capacity first. This item simply details the first installment of the model and provides a look into the pricing and other considerations. The staff intends to provide follow up items in September and November with the rest of the model. Ultimately we will be able to explain what the ICN will cost per institution without the 27 million dollars in funding and what it costs with the funding intact.

Keith commented that he liked the concept of an organization paying a cost recovery fee when they have extraordinary or unusual demands so the network can accommodate their request and not hurt the primary constituents.

12. Peoria POP Relocation/Bradley Agreement

Karlin explained that earlier this year McLeod made the decision not to allow guests in their POP site. The ICN received notification that we must leave the site by the end of December 2001. As a result, the staff has been working with Bradley University to possibly use space they have available for the ICN POP site. The staff will come back with a status report on this issue at the September meeting.

13. Scheduled Meeting Dates

Based on the schedule of 6 meetings per year approved at the last meeting, the staff is providing information on when those meetings actually fall on the calendar for easier planning. There were no conflicts or objections to the dates listed.

Keith introduced Dan Lazell who has recently been hired as a Deputy Director for Planning and Technology at the Board of Higher Education.

Keith proposed that meeting adjourn. Meeting adjourned at 3:50 p.m.